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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,729	12/21/2001	Jaap M. Middeldorp	9310-13DVCTDV	6359
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RALEIGH, NC 27627				
EXAMINER				
LL QIAN JANICE				
ART UNIT		PAPER NUMBER		
1633				
MAIL DATE		DELIVERY MODE		
05/16/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/036,729

Applicant(s)

MIDDELDORP ET AL.

Examiner

Q. JANICE LI

Art Unit

1633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 26, 27 and 32-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 7, 8, 26 and 27 is/are allowed.
6) ☒ Claim(s) 6, 9, 32-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/2008 has been entered.

The amendment and response filed 3/17/08 are acknowledged. Claims 6-9, 26, 27, 32-34 have been amended. Claims 35, 36 are newly submitted. Claims 6-9, 26, 27, 32-36 are pending and under current examination.

Unless otherwise indicated, previous rejections that have been rendered moot in view of the amendment to pending claims or new grounds of rejections will not be reiterated.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The prior rejection of Claims 6, 9 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, is withdrawn in view of claim amendment limiting the claimed peptides to an EBV peptide.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6, 9, 32-36 are newly rejected under 35 U.S.C. 102(b) as being anticipated by *Hudson et al.* (Virol 1985;147:99-109).

The specification teaches VCA-p18 is encoded within the EBV open reading frame BFRF3 (Specification, page 7).

Hudson discloses the BFRF3 region of EBV, including the sequences of both polypeptide and nucleic acid open reading frame (see page fig. 2 at page 104), which contains a nucleic acid sequence encoding instant SEQ ID Nos: 2, 5, 6 (VCA-18 peptide and fragments), which shares 88.1% sequence homology with instant SEQ ID No: 1 (nucleotides 5-532 of instant SEQ ID No: 1), and thus comprising more than 36 contiguous nucleotides of instant SEQ ID No: 1. Since the BFRF3 region includes the entire VCA-p18 peptide, it would immunochemically reactive with the recited antibody. Accordingly, *Hudson* anticipates instant claims.

Claims 6, 9, 32-36 are newly rejected under 35 U.S.C. 102(b) as being anticipated by *Baer et al.* (Nature 1984;310:207-211, IDS).

The specification teaches VCA-p18 is encoded within the EBV open reading frame BFRF3, and VCA-p40 is encoded within the EBV open reading frame BdrF1 (Specification, page 7).

Baer discloses the complete (172,282 base pairs) nucleotide sequence of the B95-8 strain of Epstein-Barr virus, which include the BFRF3 and BdrF1 regions of the EBV (table 1, page 209). The disclosed sequence comprises a nucleic acid sequence having 98.2% homology with instant SEQ ID No: 3 (nucleotide 1-1035 of instant SEQ ID No: 3), and contains the entire nucleic acid sequence encoding VCA-p40, which comprises more than 36 contiguous nucleotides of instant SEQ ID No: 3.

Baer also discloses a nucleic acid that has 88.1% homology with instant SEQ ID No: 1 (nucleotides 5-532 of instant SEQ ID No: 1), and thus comprising more than 36 contiguous nucleotides of instant SEQ ID No: 1. Since the BFRF3 and BdrF1 region encode the entire VCA-p18 and VCA-p40 peptides, respectively, the peptides would immunochemically reactive with said antibodies.

Baer indicated in the publication that the complete DNA sequence and feature table have been deposited with the EMBL nucleotide sequence data library (See the legend in figure 1) at the time of publication, and the data was integrated into UniProtKB/Swiss-Prot database 1986 (for SEQ ID No: 3) and 1990 (SEQ ID No: 1), respectively. Accordingly, *Baer* anticipates instant claims.

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The prior rejection of Claims 6-9, 26, 27, 32-34 rejected under 35 U.S.C. 102(b) as being anticipated by *Bankier et al.* (Mol Biol Med 1983;1:425-445), is withdrawn in view of the new grounds of rejections.

Claims 7, 8, 26, 27 are free of prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Q. JANICE LI** whose telephone number is **571-272-0730**. The examiner can normally be reached on 9 AM -7:00pm, Monday through Friday, except every other Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Joseph Weitach** can be reached on **571-272-0739**. The **fax** numbers for the organization where this application or proceeding is assigned are **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547. For all other customer support, please call the USPTO Call Center (UCC) at **800-786-9199**.

*/Q. JANICE LI/
Primary Examiner,
Art Unit 1633*

QL
May 16, 2008